

1.a Legal Name and Street address of Applicant (Institution, Firm, Hospital, Person, etc.)			
6. Radioactive Material Data			
6. Radioactive Material for Medical Use			
Radioactive Material Listed In:	Items Desired (X)	Maximum Possession Limits (In millicuries)	
Title 180 NAC 3-008.09 for Invitro Studies			
Title 180 NAC 7-034.01			
Title 180 NAC 7-036			
Title 180 NAC 7-040			
Title 180 NAC 7-044			
Title 180 NAC 7-046			
Additional Items			
Xenon-133 as gas or gas in saline for blood flow studies and pulmonary function studies			
Technetium-99m aerosolized DTPA for pulmonary function studies			
High dose rate remote afterloading brachytherapy device			
6.b. Radioactive Material for Uses not Listed in Item 6.a.			
6.b.(1) <u>Element and Mass Number</u>	6.b.(2) <u>Chemical or Physical Form</u> <u>(Make and Model if sealed source)</u>	6.b.(3) <u>Maximum Activity Requested</u> <u>(Expressed as Curies, Millicuries, or Microcuries)</u>	6.b.(4) <u>Use of Each Form</u> <u>(If sealed source, also give Make and Model Number of the storage and/or device in which sealed source will be stored and/or used)</u>

Instructions for Items 7. Through 23.

For Items 7. through 23., check the appropriate box(es) and submit a detailed description of all the requested information. Begin each Item on a separate sheet, identifying the Item number and the date of the application in the lower right hand corner of each page.

If you indicate that you will follow an Appendix to the *Guide for Preparation of Applications for Medical Programs 7.0*, do not submit the pages, but specify the revision number and date of the *Guide*.

The Most current *Guide* is: Revision: _____ Date: _____

7. Radiation Safety Committee

- ☐ Names and Specialities attached; **AND**
- ☐ Duties as in Appendix B; **OR**
Equivalent Duties attached

8. Training and Experience

- ☐ Supplements A and B attached for each individual user; **AND**
- ☐ Supplement A attached for RSO

9. Instrumentation

- ☐ Appendix C Form attached; **OR**
- ☐ List by Name and Model Number

10. Calibration of Instruments

a. Survey Instruments

- ☐ Appendix D Procedures followed; **OR**
- ☐ Equivalent Procedures attached

AND

b. Dose Calibrator

- ☐ Appendix D Procedures followed; **OR**
- ☐ Equivalent Procedures attached

11. Facilities and Equipment

- ☐ Description or diagram attached; **OR**
- ☐ See Supplements C - Teletherapy Requirements

12. Personnel Training Program

- ☐ Description of training attached

13. Procedures for Ordering and Receiving Radioactive Materials

- ☐ Detailed Information Attached

14. Procedures for Safely Opening Packages Containing Radioactive Materials

- ☐ Appendix F Procedures followed; **OR**
- ☐ Equivalent Procedures attached

15. General Rules for the safe use of Radioactive Material

- ☐ Appendix G Procedures followed; **OR**
- ☐ Equivalent Procedures attached

16. Emergency Procedures

- ☐ Appendix H Procedures followed; **OR**
- ☐ Equivalent Procedures attached

17. Area Survey Procedures

- ☐ Appendix I Procedures followed; **OR**
- ☐ Equivalent Procedures attached

18. Waste Disposal

- ☐ Appendix J Form attached; **OR**
- ☐ Equivalent Information attached

19. Therapeutic Use of Radiopharmaceuticals

- ☐ Appendix K Procedures followed; **OR**
- ☐ Equivalent Procedures attached

20. Therapeutic Use of Sealed Sources

- ☐ Detailed Information attached; **AND**
- ☐ Appendix L Procedures followed; **OR**
- ☐ Equivalent Procedures attached

21. Procedures and Precautions for use of Radioactive Gases (e.g., Xenon-133)

- ☐ Detailed Information attached

22. Procedures and Precautions for Use of Radioactive Material in Animals

- ☐ Detailed Information attached

23. Procedures and Precautions for Use of Radioactive Material Specified in Item 6.b.

- ☐ Detailed Information attached

24. Personnel Monitoring Devices (Check and/or complete as appropriate)		
Type	Supplier/Service Company	Exchange Frequency
24.a. Whole Body <input type="checkbox"/> Film Badge <input type="checkbox"/> TLD <input type="checkbox"/> DOSL <input type="checkbox"/> Other: (Specify)		<input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Other: (Specify)
24.b. Finger <input type="checkbox"/> Film Badge <input type="checkbox"/> TLD <input type="checkbox"/> Other: (Specify)		<input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Other: (Specify)
24.c. Wrist <input type="checkbox"/> Film Badge <input type="checkbox"/> TLD <input type="checkbox"/> Other: (Specify)		<input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Other: (Specify)
24d. Other (Specify)		

26. CERTIFICATION

(This Item must be completed by applicant.)

The applicant and any official executing this document on behalf of the applicant named in Item 1.a., certify that this application is prepared in conformity with the Nebraska Department of Health and Human Services Regulation and Licensure, Title 180, Regulations for the Control of Radiation and that all information contained herein, including any supplements attached hereto, is true and correct to the best of our knowledge and belief.

Applicant Name From Item 1.a.

By: _____
Signature

Date: _____

Print Name and Title of certifying official authorized to act on behalf of the applicant

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APPLICATION FOR RADIOACTIVE MATERIAL LICENSE
Medical or Teletherapy

SUPPLEMENT A

Training and Experience
Authorized User or Radiation Safety Officer (RSO)

1. Name of Individual <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <div style="margin-top: 10px;"> <input type="checkbox"/> Authorized User <input type="checkbox"/> Radiation Safety Officer </div>	2. Physician who is licensed to dispense drugs in the practice of medicine in Nebraska? <div style="margin-top: 10px;"> <input type="checkbox"/> YES <input type="checkbox"/> NO </div>			
3. Certification				
3.a. Specialty Board	3.b. Category	3.c. Month and Year Certified		
4. Training Received in Basic Radioisotope Handling Techniques				
	<u>Location and Dates of Training</u>	<u>Clock Hours in Lecture or Laboratory</u>	<u>Clock Hours of Supervised Laboratory Experience</u>	
4.a. Radiation Physics and Instrumentation				
4.b. Radiation Protection				
4.c. Mathematics Pertaining to the Use and Measurement of				
4.d. Biological Effects of Radiation				
4.e. Radiopharmaceutical Chemistry				
5. Experience with Radiation (Actual Use of Radioisotopes or Equivalent Experience)				
<u>Isotope</u>	<u>Maximum Activity</u>	<u>Where Experience Was Gained</u>	<u>Months/Years</u>	<u>Type of Use</u>

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APPLICATION FOR RADIOACTIVE MATERIAL LICENSE
Medical or Teletherapy

SUPPLEMENT B
Preceptor Statement

Supplement B must be completed by the applicant physician's preceptor. If more than one preceptor is necessary to document experience, obtain a separate statement from each.

<u>1. Full Name and Street Address of Applicant Physician</u>			
Full Name:			
Address:			
City, State Zip+4			

<u>2. Clinical Training and Experience with Radiation</u> (Actual Use of Radioisotopes)			
<u>Isotope</u>	<u>Conditions Diagnosed or Treated</u>	<u>Number of Cases Involving Personal Participation¹</u>	<u>Comments²</u>
I-125 or I-131	Diagnosis of Thyroid Function		
	Determination of Blood and Blood Plasma Volume		
	Liver Function Studies		
	Fat Absorption Studies		
	Kidney Function Studies		
	In vitro Studies		
Other			
I-125	Detection of Thrombosis		
I-131	Thyroid Imaging		
P-32	Eye Tumor Localization		
Se-75	Pancreas Imaging		
Yb-169	Cisternography		
Xe-133	Blood Flow Studies and Pulmonary Function Studies		
Other			
Tc-99m	Brain Imaging		
	Cardiac Imaging		
	Thyroid Imaging		
	Salivary Gland Imaging		
	Blood Pool Imaging		
	Placenta Localization		
	Liver and Spleen Imaging		
	Lung Imaging		
	Bone Imaging		

2. Clinical Training and Experience with Radiation (Actual Use of Radioisotopes)			
Other			
P-32 (Soluble)	Treatment of Polycythemia Vera, Leukemia, and Bone Metastases		
P-32 (Colloidal)	Intracavitary Treatment		
I-131	Diagnosis of Thyroid Function		
	Treatment of Hyperthyroidism		
Au-198	Intracavitary Treatment		
Co-60 or Cs-137	Interstitial Treatment		
	Intracavitary Treatment		
I-125 or Ir-192	Interstitial Treatment		
Ra-226	Intracavitary Treatment		
	Interstitial Treatment		
	Superficial Treatment		
Co-60 or Cs-137	Teletherapy Treatment		
Sr-90	Treatment of Eye Disease		
	Radiopharmaceutical Preparation		
Mo-99/Tc-99m	Generator		
Sn-113/In-113m	Generator		
Tc-99m	Reagent Kits		
X-Ray and Accelerator Therapy	Courses of Therapy Treatment		
Other			

¹ Key to column

Personal Participation should consist of:

1. Supervised examination of patients to determine the suitability for radioisotope diagnosis and/or treatment and recommendation for prescribed dosage.
2. Collaboration in dose calibration and actual administration of dose to the patient including calculation of the radiation dose, related measurements, and plotting of data.
3. Adequate period of training to enable physician to manage radioactive patients and follow patients through diagnosis and/or course of treatment.

² Additional information or comments may be submitted in duplicate on separate sheets.

3. Dates and Total Number of Hours Received in Clinical Radioisotope Training

(Submit in duplicate on separate sheets)

4. Training and Experience Obtained Under the Supervision of:

Supervisor's
Name:

Institution
Name:

Address

City, State
Zip+4

Radioactive material License Number(s):

5. Preceptor's Verification

Preceptor's
Name: _____
(Type or Print)

Preceptors
Name: _____
(Type or Print)

(Date)

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APPLICATION FOR RADIOACTIVE MATERIAL LICENSE
Medical or Teletherapy

SUPPLEMENT C

Requirements Specific to Teletherapy

- 1. Facilities and Equipment**
 - ☐ Description and drawing of facilities attached; **AND**
 - ☐ Description of patient viewing and communicating systems attached; **AND**
 - ☐ Description of area safeguards attached
- 2. Beam Stops**
 - ☐ Description of stops used to restrict beam orientation attached
- 3. Shielding Evaluation**
 - ☐ Evaluation of proposed shielding attached
- 4. Operating and Emergency Procedures**
 - ☐ Description of operating procedures attached; **AND**
 - ☐ Copy of emergency procedures attached
- 5. Instruction of Personnel**
 - ☐ Training program and schedule in Appendix A followed; **OR**
 - ☐ Description of instruction program for employees attached
- 6. Leak Tests of Sealed Sources**
 - ☐ Description of leak test procedures attached
- 7. Teletherapy Physicist (Use only if individual fails to meet 180 NAC 7-066.10 requirements)**
 - ☐ Statement of qualifications of the physicist who will perform teletherapy calibrations attached.